

READING TIME ^{1,8,9}: 31ms, typical.

PULSE CURRENT MEASUREMENT OPERATION

TRIGGER LEVEL:

2303: 5mA to 5A, in 5mA steps.

2303-PJ: 5A Range: 0mA to 5A, in 5mA steps.

500mA Range: 0mA to 500mA, in 0.5mA steps.

TRIGGER DELAY: 0 to 100ms, in 10µs steps.

INTERNAL TRIGGER DELAY: 25µs.

HIGH/LOW/AVERAGE MODE:

Measurement Aperture Settings: 33.3µs to 833ms, in 33.3µs steps.

Average Readings: 1 to 100.

BURST MODE:

Measurement Aperture: 33.3µs.

Conversion Rate: 3600/second, typical.

Number of Samples: 1 to 5000.

Transfer Samples Across IEEE Bus in Binary Mode: 4800 bytes/ second, typical.

LONG INTEGRATION MODE: Measurement Time⁶: 850ms (840ms) to 60 seconds in 16.7ms (20ms) steps.

GENERAL

ISOLATION (low-earth): 22V DC max.

PROGRAMMING: IEEE-488.2 (SCPI).

USER-DEFINABLE POWER-UP STATES: 5.

REAR PANEL CONNECTOR: 8-position quick disconnect terminal block for output (4), sense (2), and DVM (2).

TEMPERATURE COEFFICIENT (outside 23°C ±5°C): Derate accuracy specification by (0.1 × specification)/°C.

OPERATING TEMPERATURE:

0° to 35°C (Full power).

0° to 50°C (Derate to 70%).

STORAGE TEMPERATURE: -20° to 70°C.

HUMIDITY: <80% @ 35°C non-condensing.

POWER CONSUMPTION: 150VA max.

REMOTE DISPLAY/KEYPAD OPTION: Disables standard front panel.

DIMENSIONS: 89mm high × 213mm wide × 360mm deep (3½ in × 8½ in × 14¾ in).

SHIPPING WEIGHT: 5.4kg (12 lbs).

INPUT POWER: 100V–240V AC, 50 or 60Hz (auto detected at power-up).

WARRANTY: Two years parts and labor on materials and workmanship.

EMC: Conforms with European Union Directive Directive 89/336/EEC EN 55011, EN 50082-1, EN 61000-3-2 and 61000-3-3, FCC part 15 class B.

SAFETY: Conforms with European Union Directive 73/23/EEC EN 61010-1.

AC LINE LEAKAGE CURRENT: 450µA @ 110VAC, typ.; 600µA @ 220VAC, typ.

RELAY CONTROL JACK: 1-channel, sink 150mA max., 15V max. 5V output, 100mA max., also available on jack. Accepts 0.173 in Bantam-type plug (CS-1003-1).

ACCESSORIES SUPPLIED: User manual, service manual, output connector mating terminal (part no. CS-846).

ACCESSORIES AVAILABLE:

Model 2304-DISP: Remote Display/Keypad (4.6 in × 2.7 in × 1.5 in). Includes 2.7m (9 ft) cable and rack mount kit.

Optional Version Model 2303B: 2303 with blank front panel (only AC power indicator LED).

¹ PLC = 1.00.

² Following 15 minute warm-up, the change in output over 8 hours under ambient temperature, constant load, and line operating conditions.

³ Remote sense, at output terminals, 1000% load change; typical.

⁴ Remote sense, with 4.5m (15 ft) of 16 gauge wire and 1Ω resistance in each source lead to simulate typical test environment, up to 1.5A load change.

⁵ Minimum current in constant current mode is 6mA.

⁶ 60Hz (50Hz).

⁷ PLC = Power Line Cycle. 1PLC = 16.7ms for 60Hz operation, 20ms for 50Hz operation.

⁸ Display off.

⁹ Speed includes measurement and binary data transfer out of GPIB.